

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.2: The solutions for RS Aggarwal's Class 8 Maths Chapter 7 Exercise 7.2 prepared by the subject experts of Physics Wallah, provide a thorough and insightful guide to factorization problems.

These expert-prepared solutions provide a clear and detailed breakdown of each problem, ensuring that students can follow along and understand the factorization process. The explanations cover various techniques and approaches helping students master the key concepts required to solve the exercise effectively.

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RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.2 Overview

Exercise 7.2 in RS Aggarwal's Class 8 Maths Chapter 7 focuses on advanced factorization techniques. This exercise challenges students to apply various factorization methods to more complex algebraic expressions. The problems are designed to enhance students understanding of algebraic concepts by requiring them to use their knowledge of factoring techniques, such as grouping and special algebraic identities.

By working through the exercise students learn how to break down intricate expressions into simpler factors, which is essential for solving more complex mathematical problems. The solutions provided detailed explanations and step-by-step guidance helping students develop a deeper grasp of factorization and improve their overall problem-solving skills.

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.2 PDF

For detailed solutions to RS Aggarwal's Class 8 Maths Chapter 7 Exercise 7.2, you can access the PDF link provided below.

It is designed to help students understand the factorization techniques covered in the exercise and to practice solving complex algebraic expressions. By referring to this PDF, students can gain valuable insights into the factorization process reinforce their learning and improve their problem-solving abilities effectively.

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.2 PDF

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.2 (Exercise 7B)

RS Aggarwal Solutions for Class 8 Maths Chapter 7 Exercise 7.1 are available below. This resource provide detailed solutions and explanations for problems related to operations on algebraic expressions.

Factorise:

(Question 1) $x^2 - 36$

$$= x^2 - 6^2$$

$$= (x - 6) (x + 6)$$

(Question 2) $4a^2 - 9$

$$= (2a)^2 - (3)^2$$

$$= (2a - 3) (2a + 3)$$

(Question 3) $81 - 49x^2$

$$= (9)^2 - (7x)^2$$

$$= (9 - 7x) (9 + 7x)$$

(Question 4) $4x^2 - 9y^2$

$$= (2x)^2 - (3y)^2$$

$$= (2x - 3y) (2x + 3y)$$

(Question 5) $16a^2 - 225b^2$

$$= (4a)^2 - (15b)^2$$

$$= (4a - 15b) (4a + 15b)$$

(Question 6) $9a^2b^2 - 25$

$$= (3ab)^2 - (5)^2$$

$$= (3ab - 5) (3ab + 5)$$

(Question 7) $16a^2 - 144$

$$= (4a)^2 - (12)^2$$

$$= (4a - 12) (4a + 12)$$

$$= [4(a - 3)] [4(a + 3)]$$

$$= (4 \times 4) (a - 3) (a + 3)$$

$$= 16 (a - 3) (a + 3)$$

$$\textbf{(Question 8) } 63a^2 - 112b^2$$

$$= 7(9a^2 - 16b^2)$$

$$= 7 [(3a)^2 - (4b)^2]$$

$$= 7 (3a - 4b) (3a + 4b)$$

$$\textbf{(Question 9) } 20a^2 - 45b^2$$

$$= 5(4a^2 - 9b^2)$$

$$= 5 [(2a)^2 - (3b)^2]$$

$$= 5 (2a - 3b) (2a + 3b)$$

$$\textbf{(Question 10) } 12x^2 - 27$$

$$= 3(4x^2 - 9)$$

$$= 3[(2x)^2 - (3)^2]$$

$$= 3 (2x - 3) (2x + 3)$$

$$\textbf{(Question 11) } x^3 - 64x$$

$$= x[(x)^2 - (8)^2]$$

$$= x (x - 8) (x + 8)$$

$$\textbf{(Question 12) } 16x^5 - 144x^3$$

$$= 16x^3 (x^2 - 9)$$

$$= 16x^3 [(x)^2 - (3)^2]$$

$$= 16x^3 (x - 3) (x + 3)$$

$$\textbf{(Question 13) } 3x^5 - 48x^3$$

$$= 3x^3[(x)^2 - 16]$$

$$= 3x^3[(x)^2 - (4)^2]$$

$$= 3x^3 (x - 4) (x + 4)$$

$$\textbf{(Question 14) } 16p^3 - 4p$$

$$= 4p (4p^2 - 1)$$

$$= 4p [(2p)^2 - (1)^2]$$

$$= 4p (2p - 1) (2p + 1)$$

$$\textbf{(Question 15) } 63a^2b^2 - 7$$

$$= 7 (9a^2b^2 - 1)$$

$$= 7 [(3ab)^2 - (1)^2]$$

$$= 7 (3ab - 1) (3ab + 1)$$

$$\textbf{(Question 16) } 1 - (b - c)^2$$

$$= (1)^2 - (b - c)^2$$

$$= (1 - b + c) (1 + b - c)$$

$$\textbf{(Question 17) } (2a + 3b)^2 - 16c^2$$

$$= (2a + 3b)^2 - (4c)^2$$

$$= (2a + 3b - 4c) (2a + 3b + 4c)$$

$$\textbf{(Question 18) } (l + m)^2 - (l - m)^2$$

$$= (l + m + l - m) (l + m - l + m)$$

$$= 2l \times 2m = 4lm$$

$$\textbf{(Question 19) } (2x + 5y)^2 - 1$$

$$= (2x + 5y)^2 - (1)^2$$

$$= (2x + 5y - 1) (2x + 5y + 1)$$

$$\textbf{(Question 20) } 36c^2 - (5a + b)^2$$

$$= (6c)^2 - (5a + b)^2$$

$$= (6c + 5a + b) (6c - 5a - b)$$

(Question 21) $(3x - 4y)^2 - 25z^2$

$$= (3x - 4y)^2 - (5z)^2$$

$$= (3x - 4y + 5z) (3x - 4y - 5z)$$

(Question 22) $x^2 - y^2 - 2y - 1$

$$= x^2 - (y^2 + 2y + 1)$$

$$= x^2 - (y + 1)^2$$

$$= (x + y + 1) (x - y - 1)$$

(Question 23) $25 - a^2 - b^2 - 2ab$

$$= 25 - (a^2 + 2ab + b^2)$$

$$= (5)^2 - (a + b)^2$$

$$= (5 + a + b) (5 - a - b)$$

(Question 24) $25a^2 - 4b^2 + 28bc - 49c^2$

$$= 25a^2 - [(2b)^2 - (2 \times 2b \times 7c) + (7c)^2]$$

$$= (5a)^2 - (2b - 7c)^2$$

$$= (5a + 2b - 7c) (5a - 2b + 7c)$$

(Question 25) $9a^2 - b^2 + 4b - 4$

$$= 9a^2 - [(b)^2 - (2 \times b \times 2) + (2)^2]$$

$$= (3a)^2 - (b - 2)^2$$

$$= (3a + b - 2) (3a - b + 2)$$

(Question 26) $100 - (x - 5)^2$

$$= (10)^2 - (x - 5)^2$$

$$= (10 + x - 5) (10 - x + 5)$$

$$= (5 + x) (15 - x)$$

(Question 27) Evaluate $\{(405)^2 - (395)^2\}$

$$= (405 + 395) (405 - 395)$$

$$= 800 \times 10 = 8000$$

(Question 28) Evaluate $\{(7.8)^2 - (2.2)^2\}$

$$= (7.8 + 2.2) (7.8 - 2.2)$$

$$= 10 \times 5.6 = 56$$

Benefits of RS Aggarwal Solutions for Class 8 Maths

Chapter 7 Exercise 7.2

- **Comprehensive Understanding:** The solutions provide detailed explanations of factorization techniques, helping students grasp complex concepts and methods effectively.
- **Step-by-Step Guidance:** Each problem is broken down into clear manageable steps, making it easier for students to follow along and learn the process of factorizing various algebraic expressions.
- **Reinforcement of Concepts:** The exercise reinforces key factorization concepts and techniques, aiding in the retention and application of these skills in future mathematical problems.
- **Increased Confidence:** With clear and thorough explanations, students gain confidence in their ability to solve factorization problems and apply their knowledge effectively.
- **Enhanced Problem-Solving Skills:** By working through a range of problems, students develop and refine their problem-solving abilities, which is crucial for tackling more challenging mathematical tasks.